

Remarks

Applicants believe that this amendment places the subject application in better condition for allowance and in so doing introduces no new issues. Therefore, entry of this Amendment, reconsideration of the application, and allowance of all claims pending herein is respectfully requested.

Claims 1-20 were previously presented in the subject application. Claims 1, 3, 4, 7, 11-14 have been amended to specifically recite that "each computer PCi is configured for direct data exchange with substantially every other PCi." Claims 1-20 remain pending.

Support for these amendments may be found in the original specification and claims. As previously submitted, each of the independent claims recites "said plurality n of computers PCi are communicably coupled via a connector with a switch," except for claim 3, which similarly recites "said plurality n of computers PCi are communicably coupled via a connector configured for full duplex transmission and configured for a switching function." Also, Fig. 1 shows computers 1 connected by network cable 3 to switching hub 2. This structure allows for the direct exchange of data among any two partner computers. The Examiner's concerns are addressed separately below in the order raised in the outstanding Office Action. No new matter has been added.

Rejections under § 102:

Claims 1-20 stand rejected under § 102 as anticipated by Kaufman et al., U.S. Patent No. 7,590,984. To the extent deemed relevant to the amended claims, Applicants respectfully traverse this rejection.

As amended, the independent claims (other than claim 3) recite "wherein said plurality n of computers PCi are communicably coupled via a connector with a switch, so that each computer PCi is configured for direct data exchange with substantially every other computer PCi." Amended claim 3 similarly recites "wherein said plurality n of computers PCi are communicably coupled via a connector configured for full duplex transmission and configured for a switching function, so that each computer PCi is configured for direct data exchange with substantially every other computer PCi."

Kaufman does not disclose a plurality of computers, each communicably coupled with a switch, so that each computer is configured for direct data exchange with substantially every other computer. Instead, Kaufman discloses loosely connected clusters of computers. "The loosely coupled, asynchronous, distributed communications infrastructure provides complete flexibility in the way the various problem pieces communicate." (Kaufman col. 19 lines 37-39). Kaufman teaches that these computers would be remotely connected via the Internet. "System 100 targets the compute environment of the Internet, where the machines being used are not necessarily dedicated, nor are they necessarily in the same administrative domain." (Kaufman col. 10 lines 49-52).

Also, Kaufman does not disclose a plurality of computers, wherein each computer is configured for direct data exchange with substantially every other computer. Instead, Kaufman teaches that communications among computers are routed through central servers. (Kaufman col.10 lines 28-30, 62-67; col. 11 lines 1-2, 65-67). "Compute nodes sharing data with VPPs [groups of data called Variable Problem Partitions] using other servers simply route those specific messages and requests accordingly." (Kaufman col. 15 lines 11-13, col. 8 line 22). Therefore, Kaufman does not disclose communicably coupled computers configured for direct data exchange with substantially every other computer.

The Office Action states that "Kaufman discloses ... wherein said plurality n of computers PCi are communicably coupled via a connector with a switch (col. 1, lines 29-35)." (Office Action p.2). The cited passage (col. 1, lines 29-35) is in the "Background of the Invention" section of the Kaufman disclosure. Applicants respectfully submit that this section does not disclose communicably coupled via a connector with a switch, but instead only refers to "multiple machines loosely connected." (Kaufman col. 1 lines 34-35).

The Office Action also states that Kaufman discloses the following:

wherein each computer PCi of said plurality n is configured-to for a first exchange of a partial data unit with a partner computer chosen from said plurality n of computers, so that no more than one computer PCi is idle during said first exchange (col. 4, lines 58-60: 'The problem, as defined, requires that every machine exchange data with machines handling adjacent region of space at every cycle.')

(Office Action p.3). The cited passage (col. 4, lines 58-60), which is also in the "Background of the Invention" of the Kaufman disclosure, does not disclose a plurality of computers, wherein each computer is configured for direct data exchange with a partner computer. Instead, this section only discloses data exchange with computers containing neighboring data. "The problem, as defined, requires that every machine exchange data with machines handling adjacent regions of space at every cycle." (Kaufman col. 4 lines 58-60). This appears to be a reference to data cells containing pointers to neighboring cells.

Using Cartesian coordinates, the smallest "elements" or "cells" in this space are squares with sides of unit length. ... Reproduction or propagation to adjacent sites or cells requires that each cell also store pointers to neighboring cells. ... In the example, the propagate method causes, at every iteration, an entity at site (i,j) to spread to it's nearest neighbors at sites (i+1,j), (i-1,j), (i,j+1), (i,j-1)....

(Kaufman col. 4 lines 24-26, 33-35, 37-40). The cited passage does not disclose a system wherein each computer is configured to exchange data with substantially every other computer.

Therefore, Kaufman does not anticipate the claims.

CONCLUSION

For at least any one of the foregoing alternate reasons, Applicants submit that the dependent claims are allowable for the same reasons as the independent claims from which they directly or ultimately depend, as well as for their additional limitations. Applicants therefore further submit that all of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot.

This application is now believed to be in condition for allowance, and such action at an early date is respectfully requested. However, if any matters remain unresolved, the Examiner is encouraged to contact the undersigned by telephone.

In the unlikely event that the transmittal letter is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorizes the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this

document to **Deposit Account No. 50-0734** referencing Docket No. 1215.004. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Respectfully submitted,

A handwritten signature in cursive script that reads "Kathleen Campbell".

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